CATALOG DOCUMENTATION
NATIONAL COASTAL ASSESSMENT- NORTHEAST DATABASE
YEAR 2001 STATIONS
SAMPLING EVENT DATA: "EVENTS"

TABLE OF CONTENTS

1. DATASET IDENTIFICATION

1.1 Title of Catalog document
National Coastal Assessment-Northeast Region Database
Year 2001 Stations
Sampling Event Data

1.2 Authors of the Catalog entry
John Kiddon, U.S. EPA NHEERL-AED
Harry Buffum, Computer Sciences Corp.

1.3 Catalog revision date
December 29, 2003

1.4 Dataset name
EVENTS

1.5 Task Group
National Coastal Assessment-Northeast

1.6 Dataset identification code
002

1.7 Version
001

1.8 Request for Acknowledgment
EMAP requests that all individuals who download EMAP data acknowledge the source of these data in any reports, papers, or presentations. If you publish these data, please include a statement similar to: "Some or all of the data described in this article were produced by the U. S. Environmental

Protection Agency through its Environmental Monitoring and Assessment Program (EMAP)".

2. INVESTIGATOR INFORMATION (for full addresses see Section 13)

2.1 Principal Investigators

Gerald Pesch, U.S. EPA NHEERL-AED
Walter Galloway, U.S. EPA NHEERL-AED
Donald Cobb, U.S. EPA NHEERL-AED

2.2 Sample Collection Investigators

Donald Cobb, U.S. EPA NHEERL-AED

2.3 Sample Processing Investigators

Not Applicable

3. DATASET ABSTRACT

3.1 Abstract of the Dataset

The EVENTS data file reports information about the sampling events conducted in the 2001 National Coastal Assessment (Northeast component). Reported here is information regarding the sampling event, including: sampling date; water depth at station; actual station location (planned locations are reported in the STATIONS data file); and presence or absence of submerged aquatic vegetation (SAV) or macroalgae. One record is presented per sampling event.

3.2 Keywords for the Dataset

Latitude, longitude, station water depth, sampling date, SAV, macroalgae

4. OBJECTIVES AND INTRODUCTION

4.1 Program Objective

The National Coastal Assessment (NCA) is a national monitoring and assessment program with the primary goal of providing a consistent evaluation of the estuarine condition in U.S. estuaries. It is an initiative of the Environmental Monitoring and Assessment Program (EMAP), and is a partnership of several federal and state environmental agencies, including: EPA's Regions, Office of Research and Development, and Office of Water; state environmental protection agencies in the 24 marine coastal states and Puerto Rico; and the United States Geological Survey (USGS) and the National Oceanic and Atmospheric Agency (NOAA). The five-year NCA program was initiated in 2000, and is also known as the Coastal 2000 Program.

Stations were randomly selected using EMAP's probabilistic sampling framework and were sampled once during a summer index period (June to October). A consistent suite of indicators was used to measure conditions in the water, sediment, and in benthic and fish communities. The measured data may be used by the states to meet their reporting requirements under

the Clean Water Act, Section 305(b). The data will also be used to generate a series of national reports characterizing the condition of the Nation's estuaries.

4.2 Dataset Objective

This dataset reports information regarding the sampling event. Only data from the Northeastern U.S. states (Maine through Delaware) are reported here.

4.3 Dataset Background Discussion

A two-year sampling design was employed for 2000-2001 NCA program in the Northeast. Analysts may therefore wish to consider the two years of data together.

This database contains data collected in 2001 from the Northeast component of the NCA, measured in the estuaries of the states Maine through Delaware. Nine federal-state cooperative agreements were formed to administer the NCA program in Northeast U.S.(designated by the parameter ST_COOP, which reported in the STATIONS data file).

The EVENTS data file contains the actual sampling date, latitude, and longitude. These entries may differ slightly from that initially planned by the NCA managers. Information regarding planned locations is reported in the STATIONS data file. The presence or absence of SAV or macroalgae is determined by visual observation at the time of sampling.

NCA planners provide two alternate locations for a station location in the event that the original location cannot be sampled. The parameter STA_ALT indicates whether the station location was the original site, first alternate, or second alternate—STA_ALT = "A", "B", or "C", respectively. Also refer to discussion in the STATIONS metadata file regarding use of this parameter during analysis of the data.

If it were not possible to sample within 0.05 nautical mile of the planned location (*e.g.*, due to inadequate depth, safety concerns), the sampling site was relocated at random to the nearest acceptable location or was classified as 'not sampled'. Sampling operations were then performed at the alternate planned location as noted in the discussion regarding the parameter STA_ALT above.

Some stations were visited more than once in 2001, as is indicated by the parameter VIS_NUM = 2 or 3. Users may wish to disregard results from return visits to avoid "double counting."

4.4 Summary of Dataset Parameters

* denotes parameters that should be used as key fields when merging data files

*STATION	Station Identifier
*STAT_ALT	Station Location (A, B or C)
*EVNTDATE	Event Date
VISNUM	Number of Visit to this Station
STADEPTH	Depth of Water at Station (m)
EVNT_LAT	Event Latitude (decimal degrees, datum NAD83
EVNT_LNG	Event Longitude (decimal degrees, datum NAD83)
SAV	Submerged Aquatic Vegetation visible
MACROALG	Macro-Algae present at Station

5. DATA ACQUISITION AND PROCESSING METHODS

5.1 Data Acquisition / Field Sampling

5.1.1 Sampling Objective

Record the date, location, water depth, and visit number of sampling events in estuaries of the Northeastern U.S. states during the 2001 NCA program.

5.1.2 Sample Collection: Methods Summary
A Differential GPS or a Loran system was used to measure station latitude and longitude. Station depth was measured with an electronic depth finder. These measurements were performed at the beginning of a sampling event. Presence of submerged aquatic vegetation and macro-algae and was determined by visual inspection.

5.1.3 Beginning Sampling Dates
25 June 2001

5.1.4 Ending Sampling Dates
31 October 2001

5.1.5 Sampling Platform
Samples were collected from gasoline or diesel powered boats 18 to 133 feet in length.

5.1.6 Sampling Equipment
The navigation system consists of two components: a Northstar Loran receiver and a Leica MX400 Differential GPS receiver.

5.1.7 Manufacturer of Sampling Equipment
LORAN: Northstar
GPS: Raytheon

5.1.8 Key Variables
Not applicable

5.1.9 Sampling Collection: Calibration
Not applicable

5.1.10 Sample Collection: Quality Control
The station latitude and longitude values were referenced to the datum NAD83". If it were not possible to sample within 0.05 nautical mile of the planned location (*e.g.*, due to inadequate depth, safety concerns), the sampling site was relocated at random to the nearest acceptable location or was classified as 'not sampled', and sampling was performed at the alternate planned location (see Section 4.4). Recorded and nominal latitudes and longitude values were compared at the conclusion of the field season.

5.1.11 Sample Collection: References
Strobel, C.J. 2000. Coastal 2000-Northeast Component: Field Operations Manual U. S. Environmental Protection Agency, National Health and Environmental Effects Research Laboratory, Atlantic Ecology Division, Narragansett, RI. EPA/620/R-00/002.

5.1.12 Sample Collection: Alternate Methods
For ST_COOP=CT (Connecticut, Long Island Sound) and CT-FSH (Connecticut, LIS Fish Survey): No Macro-algae or SAV observations were recorded. Consult the STATIONS dataset for ST_COOP information.

5.2 Data Preparation and Sample Processing
No analytical processing was involved with the EVENTS parameters

6. DATA ANALYSIS AND MANIPULATIONS

6.1 Name of New or Modified Values

Not applicable

6.2 Description of Data Manipulation

Not applicable

7. DATA DESCRIPTION

7.1 Description of Parameters

7.1.1 Components of the Dataset

Name	Type	Length	Label
STATION	Char	9	Station Identifier
EVNTDATE	mmddyyyy	8	Event Date
STAT_ALT	Char	1	Station Location (A,B or C)
VISNUM	Num	8	Number of Visit to this Station
STADEPTH	Num	8	Depth of Water at Station (m)
EVNT_LAT	Num	8	Event Latitude-Decimal Degrees
EVNT_LNG	Num	8	Event Longitude-Decimal Degrees
SAV	Char	1	Submerged Aquatic Vegetation visible
MACROALG	Char	1	Macro-Algae present at Station

7.1.2 Precision of Reported Values

EVNT_LAT and EVNT_LNG are reported to 0.0001 decimal degree units.

7.1.3 Minimum Value in Dataset

EVNTDATE	6/25/01
VISNUM	1
STADEPTH	0.1
EVNT_LAT	38.4739
EVNT_LNG	-75.6976

7.1.4 Maximum Value in Dataset

EVNTDATE	10/31/01
VISNUM	3
STADEPTH	73.4
EVNT_LAT	45.1848
EVNT_LNG	-66.9797

7.2 Data Record Example

7.2.1 Column Names for Example Records

STATION EVNTDATE STAT_ALT VISNUM STADEPTH EVNT_LAT EVNT_LNG SAV MACROALG

7.2.2 Example Data Records

STATION	STAT_ALT	EVNTDATE	VISNUM	STADEPTH	EVNT_LAT	EVNT_LNG	SAV	MACROALG
DE01-0050	A	10/7/01	1	14.5	39.5891	-75.5630	N	N
DE01-0052	A	10/7/01	1	12.3	39.4531	-75.5600	N	N
DE01-0054	A	10/6/01	1	14.9	39.2999	-75.3820	N	N
DE01-0056	A	10/4/01	1	12.1	39.1670	-75.2830	N	N
DE01-0058	A	7/31/01	1	3.1	38.9533	-75.3210	N	N

8. GEOGRAPHIC AND SPATIAL INFORMATION

8.1 Minimum Longitude (Westernmost)
-75.6977 decimal degrees

8.2 Maximum Longitude (Easternmost)
-67.0482 decimal degrees

8.3 Minimum Latitude (Southernmost)
38.4739 decimal degrees

8.4 Maximum Latitude (Northernmost)
45.1848 decimal degrees

8.5 Name of area or region
The National Coastal Assessment Northeast Region covers the northeastern US coastline from Maine to Delaware.

9. QUALITY CONTROL AND QUALITY ASSURANCE

9.1 Measurement Quality Objectives
Provide accurate information regarding the location of sampling events

9.2 Data Quality Assurance Procedures
All measurements were performed in the field. See Section 5.1.10 for sampling QA/QC procedures.

9.3 Actual Measurement Quality
Not applicable

10. DATA ACCESS

10.1 Data Access Procedures
Data can be downloaded from the web
http://www.epa.gov/emap/nca/html/regions/index.html

10.2 Data Access Restrictions
None

10.3 Data Access Contact Persons
John Kiddon, U.S. EPA NHEERL-AED, Narragansett, RI
401-782-3034, 401-782-3030 (FAX), kiddon.john@epa.gov

Harry Buffum, Data Manager, CSC, Narragansett, RI
401-782-3183, 401-782-3030 (FAX), buffum.harry@epa.gov

10.4 Dataset Format
ASCII (CSV) and SAS Export files

10.5 Information Concerning Anonymous FTP
Not available

10.6 Information Concerning WWW
No gopher access, see Section 10.1 for WWW access

10.7 EMAP CD-ROM Containing the Dataset
Data not available on CD-ROM

11. REFERENCES

Strobel, C.J. 2000. Environmental Monitoring and Assessment Program: Coastal 2000 - Northeast component: field operations manual. Narragansett (RI): U.S. Environmental Protection Agency, National Health and Environmental Effects Research Laboratory, Atlantic Ecology Division. EPA/620/R-00/002. 68 p.

U.S. EPA. 2001. National Coastal Assessment: Field Operations Manual. U.S. Environmental Protection Agency, Office of Research and Development, National Health and Environmental Effects Research Laboratory, Gulf Ecology Division, Gulf Breeze, FL. EPA/620/R-01/003. 72 p.

U.S. EPA. 2001. Environmental Monitoring and Assessment Program (EMAP): National Coastal Assessment Quality Assurance Project Plan 2001-2004. U.S. Environmental Protection Agency, Office of Research and Development, National Health and Environmental Effects Research Laboratory, Gulf Ecology Division, Gulf Breeze, FL. EPA/620/R-01/002. 189 p.

12. TABLE OF ACRONYMS

AED	Atlantic Ecology Division
CSC	Computer Sciences Corporation
EMAP	Environmental Monitoring and Assessment Program
EPA	Environmental Protection Agency
NCA	National Coastal Assessment
NHEERL	National Health and Environmental Effects Research Laboratory
QA/QC	Quality Assurance/Quality Control
WWW	World Wide Web

13. PERSONNEL INFORMATION

Sandra Benyi, Research Biologist
U.S. Environmental Protection Agency, NHEERL-AED
27 Tarzwell Drive, Narragansett, RI 02882-1197
401-782-3041, 401-782-3030 (FAX), benyi.sandra@epa.gov

Harry Buffum, Database Manager, Computer Sciences Corporation.
U.S. Environmental Protection Agency, NHEERL-AED
27 Tarzwell Drive, Narragansett, RI 02882-1197
401-782-3183, 401-782-3030 (FAX), buffum.harry@epa.gov

Don Cobb, Chemist
U.S. Environmental Protection Agency, NHEERL-AED
27 Tarzwell Drive, Narragansett, RI 02882-1197
401-782-9616, 401-782-3030 (FAX), cobb.donald@epa.gov

Walter Galloway, NCA Project Officer
U.S. Environmental Protection Agency, NHEERL-AED
27 Tarzwell Drive, Narragansett, RI 02882-1197
401-782-3096, 401-782-3030 (FAX), galloway.walt@epa.gov

Steve Hale, EMAP Information Manager
U.S. Environmental Protection Agency, NHEERL-AED
27 Tarzwell Drive, Narragansett, RI 02882-1197
401-782-3048, 401-782-3030 (FAX), hale.stephen@epa.gov

Melissa Hughes, Data Librarian, Computer Sciences Corporation.
U.S. Environmental Protection Agency, NHEERL-AED
27 Tarzwell Drive, Narragansett, RI 02882-1197
401-782-3184, 401-782-3030 (FAX), hughes.melissa@epa.gov

John Kiddon, AED Oceanographer
U.S. Environmental Protection Agency, NHEERL-AED
27 Tarzwell Drive, Narragansett, RI 02882-1197
401-782-3044, 401-782-3030 (FAX), kiddon.john@epa.gov

Joe LiVolsi, AED QA Officer
U.S. Environmental Protection Agency, NHEERL-AED
27 Tarzwell Drive, Narragansett, RI 02882-1197
401-782-3163, 401-782-3030 (FAX), livolsi.joseph@epa.gov

Gerald Pesch, Director Northeast NCA and Project Officer
U.S. Environmental Protection Agency, NHEERL-AED
27 Tarzwell Drive, Narragansett, RI 02882-1197
401-782-3007, 401-782-3030 (FAX), pesch.gerald@epa.gov

Charlie Strobel, AED Analyst
U.S. Environmental Protection Agency, NHEERL-AED

27 Tarzwell Drive, Narragansett, RI 02882-1197
401-782-3180, 401-782-3030 (FAX), strobel.charles@epa.gov

Hal Walker, AED Analyst
U.S. Environmental Protection Agency, NHEERL-AED
27 Tarzwell Drive, Narragansett, RI 02882-1197
401-782-3134, 401-782-3030 (FAX), walker.henry@epa.gov